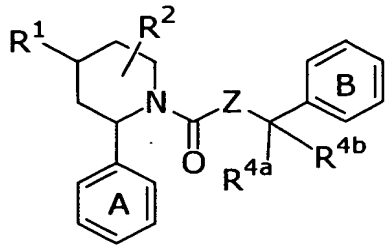
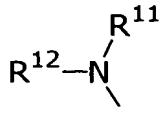
[Document Name] Claims

[Claim 1] Piperidine compound represented by the formula [I]:



[I]

wherein Ring A represents a benzene ring optionally substituted by a substituent(s), Ring B represents a benzene ring optionally substituted by a substituent(s), R^1 represents an optionally substituted alkyl group, an optionally substituted hydroxyl group, a substituted thiol group, a substituted carbonyl group, a substituted sulfinyl group, a substituted sulfonyl group, or a group represented by the formula:



R^{11} represents a substituted carbonyl group or a substituted sulfonyl group, R^{12} represents hydrogen atom or an optionally substituted alkyl group, R^2 represents hydrogen atom, an optionally substituted hydroxyl group, an amino group optionally substituted by a substituent(s), an optionally substituted alkyl group, a substituted carbonyl group or a halogen atom, Z represents oxygen atom or a group represented by $-N(R^3)-$, R^3 represents hydrogen atom or an optionally substituted alkyl group, R^{4a} represents an optionally substituted alkyl group, R^{4b} represents an optionally substituted alkyl group, or a pharmaceutically acceptable salt thereof.

[Claim 2] The compound according to Claim 1, wherein R^1 is an optionally substituted alkyl group.

[Claim 3] The compound according to Claim 1, wherein R^1 is a an optionally substituted hydroxyl group.

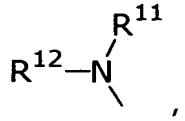
[Claim 4] The compound according to Claim 1, wherein R^1 is thiol group substituted by a substituent(s).

[Claim 5] The compound according to Claim 1, wherein R^1 is a substituted carbonyl group.

[Claim 6] The compound according to Claim 1, wherein R^1 is a substituted sulfinyl group.

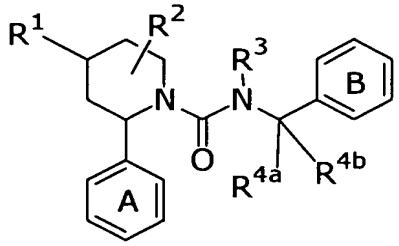
[Claim 7] The compound according to Claim 1, wherein R^1 is a substituted sulfonyl group.

[Claim 8] The compound according to Claim 1, wherein R^1 is a group represented by the formula:



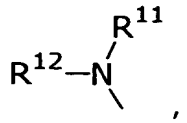
R^{11} represents a substituted carbonyl group or a substituted sulfonyl group, and R^{12} represents hydrogen atom or an optionally substituted alkyl group.

[Claim 9] A process for preparing a piperidine compound represented by the formula [I']:



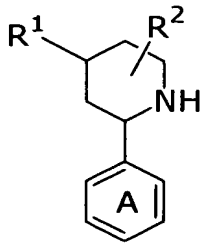
[I']

wherein Ring A represents an optionally substituted benzene ring, Ring B represents an optionally substituted benzene ring, R^1 represents an optionally substituted alkyl group, an optionally substituted hydroxyl group, a substituted thiol group, a substituted carbonyl group, a substituted sulfinyl group, a substituted sulfonyl group, or a group represented by the formula:



R^{11} represents a substituted carbonyl group or a substituted sulfonyl group, R^{12} represents hydrogen atom or an optionally substituted alkyl group, R^2 represents hydrogen atom, an optionally substituted hydroxyl group, an optionally substituted amino group, an optionally substituted alkyl group, a substituted carbonyl group or a halogen atom, R^3 represents hydrogen atom or an optionally substituted alkyl group, R^{4a} represents an optionally substituted alkyl group, R^{4b} represents an optionally substituted alkyl group,

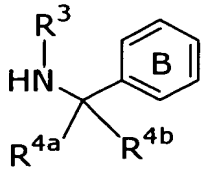
or a pharmaceutically acceptable salt thereof, which comprises reacting a compound represented by the formula [II]:



[II]

wherein Ring A, R^1 and R^2 have the same meanings as defined above,

and a compound represented by the formula [III]:



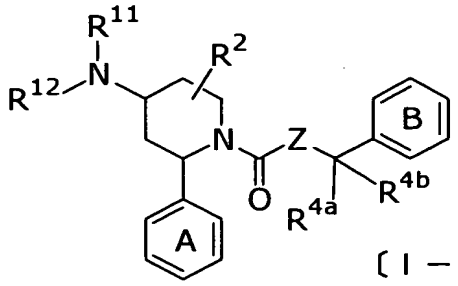
[III]

wherein Ring B, R^3, R^{4a} and R^{4b} have the same meanings as defined above,

in the presence of a urea bond forming agent, and then, converting it into a pharmaceutically acceptable salt thereof, if necessary.

[Claim 10] A process for preparing a piperidine compound

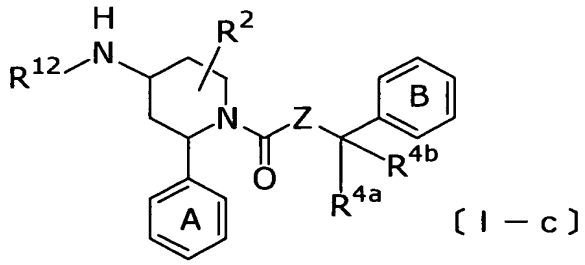
represented by the formula [I-b]:



[I-b]

wherein Ring A represents an optionally substituted benzene ring, Ring B represents an optionally substituted benzene ring, R^{11} represents a substituted carbonyl group or a substituted sulfonyl group, R^{12} represents hydrogen atom or an optionally substituted alkyl group, R^2 represents hydrogen atom, an optionally substituted hydroxyl group, an optionally substituted amino group, an optionally substituted alkyl group, a substituted carbonyl group or a halogen atom, Z represents oxygen atom or a group represented by $-N(R^3)-$, R^3 represents hydrogen atom or an optionally substituted alkyl group, R^{4a} represents an optionally substituted alkyl group, R^{4b} represents an optionally substituted alkyl group,

or a pharmaceutically acceptable salt thereof, which comprises reacting a compound represented by the formula [I-c]:



[I-c]

wherein Ring A, Ring B, R^{12}, R^2, Z, R^{4a} and R^{4b} have the same meanings as defined above,

and a compound represented by the formula [VI]:

$$R^{11}\text{-}X^2 \qquad [VI]$$

wherein R^{11} has the same meaning as defined above, and X^2 represents an eliminating group,

and then, converting it into a pharmaceutically acceptable salt thereof, if necessary.